IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of the claims in the application:

1-16. (Canceled)

17. (Currently amended) A system for controlling operating features of a model train, comprising:

a transformer operative to provide a voltage to a block of track for a model train, the transformer including means for manually setting the voltage to indicate a desired speed of the model train;

a voltage sensor ~~disposed~~ coupled to the block of track to sense the voltage provided thereon by the transformer;

a control box electrically and mechanically coupled to said track operative to allow for the selection and carrying out of operating features of said model train operating on said track in a command control mode of operation, comprising:

(i) a housing;

(ii) a plurality of selection devices mounted on said housing wherein each selection device corresponds to a respective operating feature of said train;

(iii) a controller connected to said selection devices, the controller configured to determine ~~a~~ the desired speed of the model train ~~speed responsive to~~ from an input provided by the voltage sensor;

(iv) a transmitter electrically connected between the output of said controller and said track, and operative to generate digital messages corresponding to said selection devices and the ~~determined~~ desired model train speed, and further operative to inject said digital messages onto said track;

(v) a power supply connected to said controller and operative to provide suitable power to said controller; and

a receiver on said train operative to receive said digital messages generated by said digital signal generator.

18. (Previously presented) A system in accordance with Claim 17 further comprising:

a wireless receiver operative to receive signals generated and sent by a remote control;

said voltage sensor comprised of a DC offset detector and an AC voltage detector connected between said transformer and said controller;

a zero-cross detector connected between the output of said power supply and the input of said controller;

wherein said voltage sensor and said zero-cross detector are collectively operative to allow said controller to monitor the voltage being applied to said track and to generate and transmit corresponding speed command signals to said receiver on said train.

19. (Original) A system in accordance with Claim 18 wherein said AC voltage detector is a peak detector device.

20. (Original) A system in accordance with Claim 18 wherein said controller is operative to repeat said speed command signals to said receiver a predetermined number of times by using a queue technique.

21. (Original) A system in accordance with Claim 18 wherein said zero-cross detector is connected between the output of said transformer and the input of said controller.

22. (Original) A system in accordance with Claim 17 further comprising a switching means for selecting between one of two of said trains that are operating on the same block of track or between a first and second train operating on separate blocks of track.

23. (Original) A system in accordance with Claim 22 wherein said switching means is operative to actuate automatically to thereby select one said trains whose speed is altered.

24. (Original) A system in accordance with Claim 17, wherein said plurality of selection devices are pushbuttons.

25. (Original) A system in accordance with Claim 17, wherein said transmitter is operative to create said digital messages using a frequency shift key method; and wherein said receiver is operative to decode said digital messages.

26. (Original) A system in accordance with Claim 18 wherein said zero-cross detector is connected between the input of said power supply and the input of said controller.

27. (Previously presented) A method of controlling the speed of a model train comprising the steps of:

detecting an AC waveform supplied to a block of track upon which said model train travels, the AC waveform having a user selectable amplitude corresponding to a desired speed setting of the model train;

establishing a first reference point of said waveform;

sampling said AC waveform at a sampling point occurring after a pre-determined offset time interval following said reference point to obtain a sampled voltage level;

determining the desired speed setting corresponding to said sampled voltage; and

sending a speed control message to said model train identifying the desired speed setting.

28. (Original) The method of Claim 27 wherein said step of establishing a reference point includes the step of detecting the zero-cross point in the waveform using a zero-cross detector.

29. (Previously presented) The method of Claim 27 wherein the step of determining the desired speed setting further includes the substep of looking up the desired speed setting corresponding to said sampled voltage in a look-up table.

30. (Previously presented) The method of Claim 27 wherein the step of determining the desired speed setting further includes the substeps:

(i) setting a zero-movement threshold voltage;

(ii) processing said sampled voltage with said zero-movement threshold to determine the desired speed setting.

31. (Previously presented) The method of Claim 27 where said step of sending said speed control message further includes the step of repeating said speed control message a predetermined number of times using a queue technique.

32. (Canceled)

33. (Previously presented) An apparatus for controlling different model trains separately configured to respond to different non-interoperable command protocols, the apparatus comprising:

a user interface configured to indicate user input for controlling a user-selected type of a plurality of model train components;

a controller operably connected to the user interface, the controller operative to detect a user selection of a command protocol from a plurality of different non-interoperable command protocols, and to generate control signals for the model train components according to the user-selected command protocol;

a voltage sensor in communication with the controller, the voltage sensor disposed to sense a model track voltage, wherein the controller further determines a commanded train speed responsive to an input from the voltage sensor; and

a transmitter operably connected to said controller, the transmitter operative to transmit said control signals for controlling ones of the user-selected type of model train components that are responsive to the user-selected command protocol.

34. (Previously presented) The apparatus of Claim 33, further comprising a mode selection device operably connected to the controller, wherein the controller is configured to detect the user-selected command protocol based on an input state of the mode selection device.

35. (Previously presented) The apparatus of Claim 33, wherein the user interface comprises a plurality of user-settable switches each corresponding a type of the plurality of model train components.

36. (Previously presented) The apparatus of Claim 33, wherein the plurality of different non-interoperable command protocols are selected from the group consisting of: a digital addressable command control protocol, a conventional DC-offset protocol, and a constant-power DC-offset protocol.

37. (Previously presented) The apparatus of Claim 33, wherein the user interface further comprises a speed control input configured to control a voltage applied to a model train track for powering model train movement.

38. (Previously presented) The apparatus of Claim 37, wherein the controller is further configured to detect the voltage applied to the model train track, and to generate a speed control signal according to the user-selected command protocol, wherein a speed value of the speed control signal is based on the detected voltage.

39. (Previously presented) The apparatus of Claim 37, wherein the user interface comprises a rotating knob.

40. (Previously presented) The apparatus of Claim 38, wherein the controller is operative to detect the voltage applied to the model train track and to generate the speed control signal at periodic intervals.

41. (Previously presented) An apparatus for controlling model train speed, comprising:

a controller operably associated with a memory, a voltage input adapted to be coupled to a track carrying a model train, and a command output, wherein the memory holds program instructions for:

receiving an input voltage at the voltage input;

determining a commanded train speed based on the input voltage;

generating a speed command according to a command protocol, wherein the command protocol comprises a protocol selected from a digital command protocol and a DC-offset command protocol; and

sending the speed command to the model train via the track using the command output.

42. (Previously presented) The apparatus of Claim 41, further comprising a power supply configured to supply motive power over a variable voltage range to a model train via a power output, the power output operably connected to the voltage input of the controller.

43. (Previously presented) The apparatus of Claim 42, further comprising a user input device operably associated with the power supply, wherein the power supply is configured to supply the power at a voltage level determined by the user input.

44. (Previously presented) The apparatus of Claim 41, wherein the memory further holds program instructions for receiving the voltage, determining the commanded train speed, and generating the speed command at periodic intervals.

45. (Previously presented) The apparatus of Claim 41, wherein the memory further holds program instructions for determining the commanded train speed as a linear function of the voltage input.

46. (Previously presented) The apparatus of Claim 41, wherein the memory further holds program instructions for determining the commanded train speed as a non-linear function of the voltage input.